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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/650,787

08/30/2000

Krishna Balachandran

11-16-38

2047

32205

7590

07/13/2004

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EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 07/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/650,787

Applicant(s)

BALACHANDRAN ET AL.

Examiner

Blanche Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5,6,12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6,12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 5,6,12,14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of variety of terms in the same subject matter causes confusion and should be avoided in claim language. It is confusing that bursts are used interchangeably between frames and channels in the claim language.

With regard to claims 5 and 6, For example, the preambles in claims 5 and 6 recites "a plurality of frames and each frame is divided into N data bursts" in ln. 2-3, and the limitations in claims 5 and 6 recite "channel as a series of bursts that occur periodically every N bursts once per frame" in ln. 4-5, "the bursts in said channel being assigned to one of even or odd frames" in ln. 8-9, and "the one of the even or odd frames" in ln. 9.

With regard to claim 12, the preamble in claim 12 recites "a plurality of frames and each frame is divided into N data bursts" in ln. 2-3, and the limitations in claim 12 recite "the bursts in one channel being assigned to one of even or odd frames" in ln. 5-6, and "the one of the even or odd frames is needed for communications over said channel" in ln. 6-7.

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With regard to claim 14, the the preamble in claim 12 recites "a plurality of frames and each frame is divided into N data bursts" in ln. 2-3, and the limitations in claim 14 recite "bursts" in ln. 4 and 5, "one of even and odd numbered frames as a first channel" in ln. 7, "the other of the even and odd numbered frames as a second channel" in ln. 8, "first and second control frames in the one and other of the even and odd numbered frames" in ln. 9-10, "the first channel need only decode the one of the even and odd numbered frames" in ln. 11-12, "the second channel need only decode the other of the even and odd number frames" in ln. 13, and "even and odd numbered frames in ln. 14.

Furthermore, according to the Specification, p.3, ln. 11, [time]slots are also known as bursts. In the art, frames consists of timeslots. It is unclear whether if the channels carry bursts, the channels also carry frames, and whether if frames are divided into burst, the frames are also divided into timeslots.

3. Claim 5,6,12 recites the limitation "multiframe" in ln. 7,7,4 respectively; and claims 5 and 6 recites the limitation "digital information over said channel" both in ln. 6. There is insufficient antecedent basis for this limitation in the claim.

It is unclear what is a multiframe with respect to the frames, bursts, and channel in the claim language. It is confusing whether digital information over said channel are the data bursts.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is

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703-305-8963. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RW

BW  
June 24, 2004



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600